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ABSTRACT

In recent years, society has emphasized the desirability of being thin. Although children may learn the attractiveness of being thin from society, another influential component may be their parents' attitudes toward food, eating, and eating restraint. This study investigated the dieting practices and beliefs in fourth-grade children and their mothers. The children's self-esteem, locus of control, and eating restraint were also assessed. Fifty children and their mothers completed an eating restraint scale; the children also completed measures of self-esteem and locus of control. Based on previous findings, children with higher eating restraint were expected to have lower self-esteem. Although the children's eating restraint, self-esteem, and locus of control were not related, the mothers' eating restraint was found to be positively related to their daughters' eating restraint and internality scores. No relationship was found between the mothers' eating restraint and their sons' eating restraint, locus of control, or self-concept measures. These findings can be interpreted in terms of same-sex identification processes. (Author/NB)

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The Relationship Between Mothers' Eating Restraint and Their Children's Attitudes and Behaviors

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Running head: MOTHER'S AND CHILDREN'S EATING RESTRAINT

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Abstract

The present study investigated the dieting practices and beliefs in fourth grade children and their mothers. The children's self-esteem, locus of control and eating restraint were also assessed. Fifty children and their mothers were administered an eating restraint scale. The children were also administered self-esteem and locus of control scales. Although the children's eating restraint, self-esteem and control were not related, the mothers' eating restraint was found to be positively related to their daughters' eating restraint and internality scores. No relationship was found between the mothers' eating restraint and their sons' eating restraint, locus of control or self-concept measures. The results were discussed in terms of same-sex identification processes.

The Relationship Between Mothers' Eating Restraint and

Their Children's Attitudes and Behaviors

In the 1990's, society emphasizes being thin and "looking right." Slender models in magazines are portrayed as the "ideal." Such media presentations affect the attitudes of people at all ages. In a survey in London, researchers found that 12 year old children considered themselves too fat and coped with these feelings by eating less. Additionally, these pre-adolescents reported guilt when they ate too much (Collins, 1988). Although children may learn the attractiveness of being thin from society, another influential component may be their parents' attitudes toward food, eating and eating restraint.

In the early years parents, mothers in particular, exert a strong and direct influence over their children's behavior, e.g., Patterson (1982). In addition to the direct control, mothers may also indirectly influence their children's behavior through modeling, e.g., Bandura (1977) and Mowrer (1960). Thus, it is plausible to assume that young children's eating behaviors, like other behavioral patterns, are at least partially due to their mothers'direct reinforcement or modeling. Bandura and Huston (1961) and Zimmerman and Koussa (1979) have shown that affectionate and rewarding models are frequently imitated. Assuming that most mothers are affectionate to their children, as well as powerful influences, these findings suggest further reasons for why children may imitate their mothers' behavior, including their eating behaviors, Mazur (1990). In addition to assessing the relationship between mother and child eating behaviors, the

intent of this study was to provide data relevant to the understanding of the development of pre-clinical symptoms of eating disorders.

When individuals diet through restricting the foods they consume, they exhibit eating restraint, and eating restraint is exemplified to the extreme by anorexics. For example, restrictor anorexics are characterized by voluntary weight loss, which is accomplished by an extremely controlled diet in which they consume an abnormally small amount of food (Schlundt & Johnson, 1990). Control is an issue for anorexics. Since adult anorexics feel helpless in controlling the rest of their lives, they exert control over their eating (Rezek & Leary, 1991). As Bruch (1988) suggested, by limiting their consumption, anorexics increase control over the environment: eating is the one behavior anorexics may control (Rezek & Leary, 1991). Bruch (1973) also asserted that by maintaining control over their own bodies anorexics are attempting to create their own identities (Harding & Lachenmeyer, 1986).

These perspectives suggest that anorexics possess an external locus of control regarding their environment and as a result strive for control over their bodies. Employing Reid and Ware's (1974) multidimensional I-E Scale, Harding and Lachenmeyer (1986) reported support for this model by showing that 30 year old anorexics were external. However, Strober (1982) used the Nowicki-Stricland (1973) I-E Scale and found that adolescent anorexics demonstrated an internal locus of control. Evidently, the relationship between locus of control, chronological age and anorexia is not clear. Hood, Moore and Garner (1982) however, suggested that anorexics

demonstrated an increase in externality as they grew older. Certainly, the different measures used by Harding and Lachenmeyer (1986) and Strober (1982) may account for their different results.

Another factor related to anorexia is low self-esteem (Cooper & Taylor, 1988; Grant & Fodor, 1986; Post & Crowther, 1985; Willmuth, Leitenberg, Rosen, & Cador, 1988). Additionally, Grant and Fodor (1986) found that self-esteem was the most influential factor in predicting anorexic behaviors in children between the 10th and 12th grades. It should be noted that Mendelson and White (1985) assessed the relationship between self and body-esteem in overweight and average weight children and found that, in general, girls had lower body-esteem than boys.

The present study examined dieting practices and beliefs in fourth grade children. Since an interest in restricting food to lose weight has been identified in 12 year olds (Collins, 1988) nine and 10 year olds were employed here to determine if similar attitudes occur prior to age 12. In addition to completing open-ended questions concerning dieting and our subjects' knowledge of it, they also completed an eating restraint questionnaire. The relationship between self-esteem, locus of control and eating restraint was also assessed. Based on previous findings (e.g., Grant & Fodor), children with higher eating restraint were expected to have lower self-esteem. Generalizations from adult anorexic studies to the present research would suggest that external locus of control and eating restraint should be directly related (Harding &

Lachenmeyer, 1986); whereas, Strober's (1982) results would predict an inverse relationship between external locus of control and pre-adolescent eating restraint.

Because mothers exert control over their children's eating, the present study also examined the possible relationship between mothers' and their children's eating restraint scores. Since they often imitate their mothers, children's eating restraint scores were expected to be directly related to those of their mothers.

Recently, Hill, Weaver and Blundell (1990) found a positive relationship between the eating restraint of mothers and their daughters, but they did not assess this association between mothers and their sons. Several investigators have shown that daughters' relative to sons' response patterns are more similar to their mothers'. For example, Smith, Burleigh, Sewell, and Krisak (1984) found that the MMPI profiles of 15 1/2 year old girls and their mothers were similar but mother-son profiles were not. Thus, one of the primary objectives of the present study was to assess the eating restraint of mothers as it relates to their daughters and sons.

In examining these relationships, gender differences were anticipated. Grant and Fodor (1986) estimated that 90-95% of anorexics are female and Klem, Klespes, Bene and Mellon (1990) found that women had higher eating restraint scores. In accordance with these findings the present study expected girls to have higher restraint scores than boys.

Method

Subjects

The subjects were 50, 4th grade school students, high SES; 28 girls and 22 boys from four private schools in North Carolina, and their mothers. Since six of the mothers did not return their questionnaires, only 44 subjects, 26 girls and 18 boys, were used when the mothers' eating restraint scores were analyzed.

Materials

Each child received a packet containing four different questionnaires. The Piers-Harris Children's Self-Concept Scale (PHCSC) was used to measure self-esteem with a focus on physical self-esteem (Piers, 1969). The scale consisted of eighty statements to which the child responded, "yes" or "no." General self-esteem was assessed via a list of ten positive (kind, good, happy, pretty/handsome, friendly, clean, smart, healthy, strong, and helpful) and ten negative (mean, sad, dirty, selfish, ugly, unfriendly, weak, stupid, bad and sick) adjectives taken from self-concept scales which were used in previous research (Inderbitzen & Best, 1986; Williams & Best, 1975) and the total PHCSC scores.

Additionally, the children were administered the Stanford Preschool Internal-External Scale (SPIES) to assess locus of control (LOC), Mischel (1974). The test consists of 14 scenarios with two alternative responses. One response indicates internal LOC and the other external LOC.

Lastly, the children completed a modified child version of the Herman and Polivy (1975) Restraint Scale devised by Davis, Best, and Hawkins (1981) to measure their

dieting concern and eating behaviors. The original adult restraint scale was administered to the subjects' mothers.

Testing occurred in groups ranging in size from seven to 22 subjects at the children's school. The testing session lasted 40 minutes. Each child received a packet containing all the questionnaires: the PHCSC, the adjective checklist, the SPIES and the Eating Restraint Scale.

After the children opened the packets, the experimenter instructed them to write their names on the first questionnaire, to answer each question and to answer the questionnaires in the order in which they found them. The order of the questionnaires varied randomly. Finally, the experimenter instructed the subjects to answer the questions the best that they could since there were no right or wrong answers. The experimenter remained in the room to answer any questions that arose. After the children completed testing, they received the Adult Eating Restraint questionnaire to take home for their mothers to complete.

The PHCSC was scored according to the standard method: the higher the score, the higher the child's self-esteem. The standard method, according to Mischel (1974) was used to code the SPIES scores. On this test a high score indicates a more internal LOC.

Finally, the Eating Restraint Scale for the children consisted of 30 questions. While 15 of these questions were used to compile the eating restraint score, the other 15 were utilized for descriptive means and analyses were performed on the following

questions: 1) How much do you weigh? 2) How much would you like to weigh? and 3) What does it mean to go on a diet? The first two questions were compared to determine if the subjects wished to gain or to lose weight. Although the responses may not reflect the children's knowledge of their actual weight, they are able to indicate their interest in gaining or losing weight. The answers to the third question were predominantly categorized as either: eating healthy or losing weight. Both the children's version and the test sent home to mothers were scored according to the methods suggested by Davis et al., (1981), see also Herman and Polivy (1975). On these tests, a high score indicated high eating restraint.

Results

In analyzing the data, Pearson product moment correlations was performed for the genders combined and for the girls and boys individually. The genders combined scores showed that the PHCSC and the adjective checklist were positively correlated, $r(42) = .62$, $p < .05$, thus the two measures of self-esteem were positively related. Mothers' eating restraint scores ($M = 38.4$, $SD = 22.6$) were positively correlated with a) their children's internality scores, $r(42) = .33$, $p < .05$; and b) their children's eating restraint, $r(42) = .29$, $p < .05$. Thus, mothers who scored high on the eating restraint scale, had children who scored high on the internal locus of control scale and on the eating restraint scale. A relationship was not found between the children's eating restraint measure and neither their own internality scores, $r(42) = -.01$, $p > .10$ nor their self-esteem, $r(42) = -.28$, $F > .10$. The correlations between mothers' eating

restraint scores and their children's, and daughters' and sons' locus of control, self-esteem and eating restraint scores are found in Table 1.

Insert Table 1 about here

In Table 1, the girls' data showed that the mothers' eating restraint was positively correlated with their daughters': internality, $r(24) = .53$, p, $< .05$ and eating restraint $r(24) = .35$, $p < .05$. The boys' scores, however, on the above mentioned factors were unrelated to their mothers' scores, $p > .10$ (see Table 1).

Another relationship that arose in the girls' data, but not in the boys' was between the children's internality and their adjective checklist scores. Those girls who rated themselves more positively on the ACL also reported that they were in control of their environment, $r(24) = .43$, $p < .05$; whereas, the boys did not show this relationship, $p > .10$.

T-tests performed between boys' ($M = 12.3$) and girls' ($M = 12.5$) eating restraint scores as well as boys' ($M = 7.8$) and girls' ($M = 7.7$) locus of control scores did not reveal gender differences, $ts < 1.0$. Finally, girls ($M = 7.9$) had a significantly lower physical self-esteem than boys ($M = 9.7$), $t(48) = 2.55$, $p < .05$.

Analyses of the children's understanding of dieting and their desire to gain or to lose weight were performed by assessing their answers on the open ended questions of the eating restraint questionnaire. Fifty-seven percent of the girls and 60% of the boys

reported that dieting meant to eat healthy, and 39% of the girls and 34% of the boys reported it meant to lose weight, $p > .10$. Additionally, 46% of the girls and 67% of the boys stated they wanted to lose weight, $\chi^2(1) = 2.37$, $p > .10$, while 35% of the females and 14% of the males said they needed to gain weight, $p > .10$. The same percentage of both girls and boys reported their weight was where they wanted it (19% of both groups).

Discussion

The primary aim of the present study was to assess several personality characteristics of male and female fourth graders in relation to their own and their mothers' eating restraint scores. In accordance with Hill et al. (1990), the current study found that the girls' eating restraint scores were directly related to their mothers' scores. A relationship did not exist, however, between mothers' eating restraint scores and their sons'. Perhaps mothers are more concerned with weight fluctuations of their daughters' relative to their sons, or mothers as models have a stronger impact on their daughters relative to their sons' behavior, and, or girls are more receptive to their mothers' behavior as compared to boys.

In addition, mothers' eating restraint scores were positively related to their daughters' internality. Again, this relationship was not found between the mothers' and sons' scores. One explanation for these findings is that mothers may have a greater influence on their daughters because girls tend to identify with their mothers more than do sons as a result of same sex identification processes (see for example, Burnstein,

Stroland, & Zaner, 1961; Davidson & Smith, 1981). Perhaps the mothers' taking control of their food intake encourages the daughters to do the same. Also, as girls note this control, they may believe that they can control other factors in their environment, resulting in the girls' high degree of internality.

Strober (1982) found that adolescent anorexia and internal locus of control were positively related. The present research which showed that 10 year old daughters' internality was associated with their mothers' eating restraint scores partially supported Strober's (1982) findings; however, the children's own eating restraint was not found to be related to their locus of control scores. It is acknowledged that eating restraint is only one factor involved in anorexia and that only when other pathological behaviors/ attitudes which are associated with anorexia occur does the relationship between anorexia (or the anorexic's eating restraint) and locus of control occur.

In addition to comparing the children's eating restraint scores with their mothers' scores, the current study also compared the girls' and boys' eating restraint scores. In contrast to Klem et al. (1990) who found that female adults had higher eating restraint scores than male adults, the present study did not find gender differences. This may indicate that gender differences in eating restraint develop later than 10 years of age. Future research with early and late adolescents should either confirm or disconfirm this hypothesis.

The present results indicated that the girls relative to the boys had lower physical self-esteem scores, which is consistent with Mendelson and White's (1985) findings.

What is also noteworthy is that girls relative to boys had no greater concern for losing weight. Connor-Greene (1988) found that college aged males wanted to gain rather than to lose weight. One explanation for her findings might be that many adolescent boys want to gain weight so they might compete in contact sports (see for example, Moore & Richman, 1991). However, 10 year old, upper middle class males rarely compete in such sports as tackle football or wrestling in their schools. Only during or after junior high school are these contact sports offered.

Concerning modeling and its impact on the development of attitudes toward eating and body weight, ongoing research will provide data obtained from fathers. A relationship between the boys' and their mothers' eating restraint was not found, but the boys' scores may be related to their fathers' eating restraint scores. If such a relationship is found, it would provide support for a same sex identification model with regard to eating, i.e., children assimilate their same sexed parents' views of eating and dieting. At the current time, however, data has not been gathered to either support or refute this hypothesis.

Authors' Notes

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Table 1

Correlations between mothers' eating restraint and all childrens', daughters' and sons' eating restraint scores, self-esteem and locus of control

	Piers Harris Physical Self-esteem	Piers Harris Total Self-esteem	Adjective Check List	Locus of Control (Internal)	Children's Eating Restraint
All Children	+.07	+.09	+.01	+.33*	+.29*
Daughters	+.10	+.10	+.08	+.53*	+.35*
Sons	+.10	+.07	-.14	+.05	+.09

*$p < .05$

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